

REPORT ON INDIANS TAXED AND NOT TAXED.

All the Indians wear Indian clothing. The oldest man is 96 years and the oldest woman is 94 years of age. By location the population is as follows:

First mesa:	
Pueblo of Tegua (Tewa).....	161
Pueblo of Sichumniva (Sichumnavi).....	103
Pueblo of Walpi	232
Total	496
Second mesa:	
Pueblo of Mishonginivi (Mishongnavi)	244
Pueblo of Shipauliva (Shipaulavi)	126
Pueblo of Shemopova (Shimopavi)	225
Total	595
Third mesa, Oraibi (a)	905
Total for the 7 Moqui pueblos.....	1,996
a Partly estimated.	

PERSONAL WEALTH AND LIVE STOCK.—The value of the Moqui property, in live stock is estimated at \$84,900, as follows:

Total.....	\$84,900
20,000 sheep, worth \$2 each.....	40,000
5,000 goats, worth \$1.50 each.....	7,500
1,100 horses or ponies, worth \$10 each.....	11,000
800 cattle, worth \$17 per head.....	13,600
3,200 burros or donkeys, at \$4 each.....	12,800

The Moquis consume annually 2,500 of their own sheep and goats, beside what they procure from the Navajos. They sell 26,000 pounds of wool a year to the traders at from 8 to 9 cents a pound and utilize the remainder in making blankets or garments. They also sell each year many blankets and baskets and some pottery and ornaments and trinkets, in all about \$1,000 a year. Money is not as essential to them as to white people, as they produce everything they eat, drink, or wear, except coffee, tea, sugar, and some spices. These they buy from the traders. They have considerable personal property in the way of silver, jewelry, turquoise, household furniture, and blankets. Silver is preferred to gold for jewelry or ornamentation.

The amount of cotton raised and made into cloth is not estimated, but the Moquis used to spin and weave enough cotton to make light summer clothing for their people. Of late years they wear but little clothing of their own manufacture, as they can buy cloth cheaper of the traders than they can raise the cotton.

THE ANNUAL FOOD SUPPLY OF THE MOQUI PUEBLOS.—The Moqui pueblos contain 1,996 people; to properly feed and clothe so many people requires thrift and labor, especially when the barren country in which they live is taken into consideration. In 1890 they planted for corn, as estimated, as follows: first mesa, 1,000 acres; second mesa, 1,000 acres; third mesa (Oraibi), 1,600 acres; total, 3,600 acres.

The yield per acre is about 12 bushels, and there are about 56 pounds to the bushel, so that in the 3,600 acres, there would be about 43,200 bushels, or 2,419,200 pounds.

Its disposition may be estimated as home consumption, 919,200 pounds; bartered to Navajos for sheep, goats, and other items, 650,000 pounds; sales to traders, 150,000 pounds; surplus stored, 700,000 pounds.

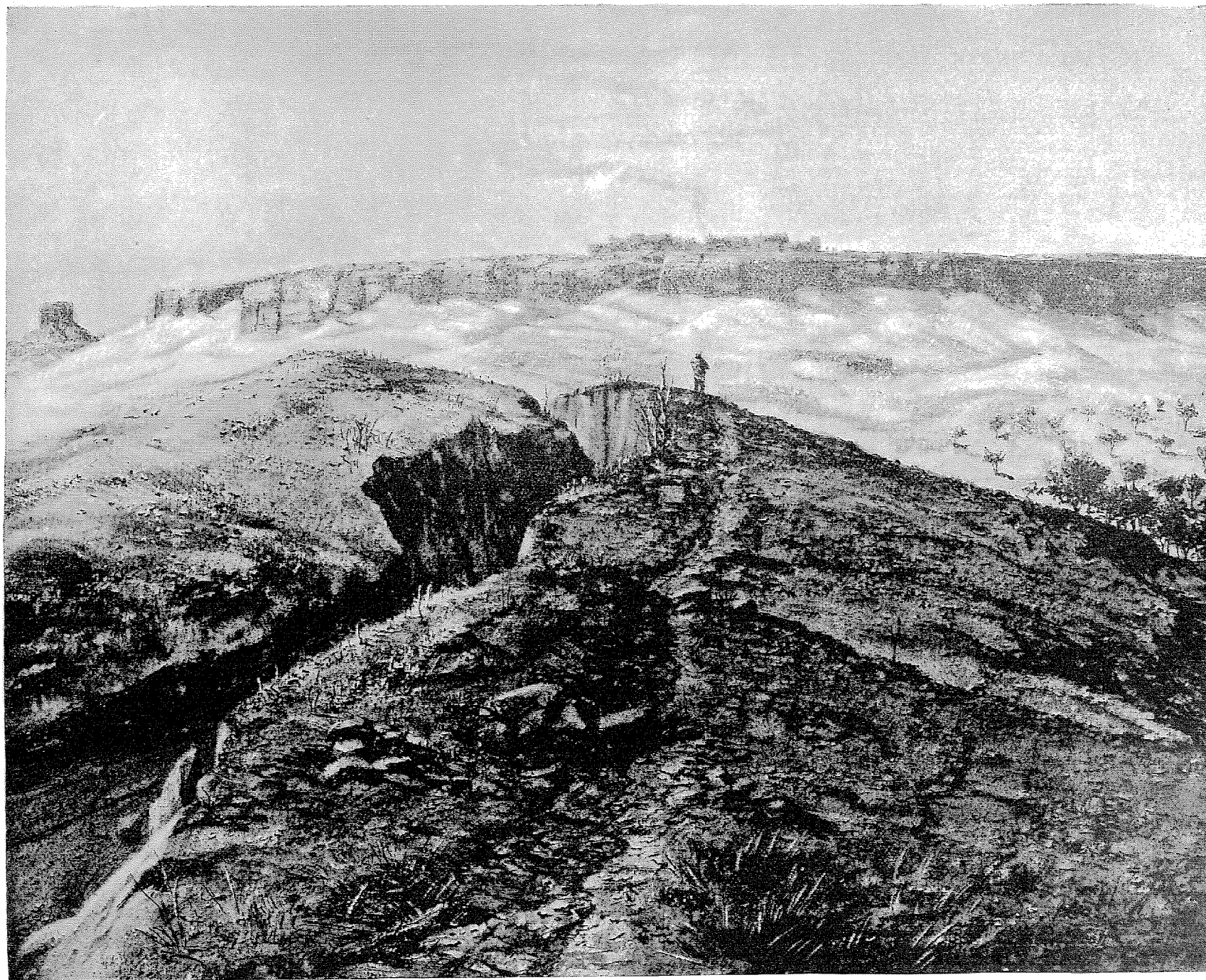
This estimate is made from information gathered at the trading posts and a general observation of the land under cultivation.

The peach orchards and vegetable gardens yield ample fruit and small vegetables and melons. The onion garden at Weepo, used in common, is of great service to these people. There are about 2,000 acres planted in vegetables between the 7 villages that are tilled by the Moquis collectively, distributed thus: first mesa, 500 acres; second mesa, 500 acres; third mesa (Oraibi), 1,000 acres.

There are fully 1,000 acres in peach trees, distributed as follows: first mesa, 300 acres; second mesa, 200 acres; third mesa (Oraibi), 500 acres.

The peach orchards are located among the sand hills at the foot of the mesas, with the exception of 2 on the first mesa, 1 on the second, and about 20 on the third. Oraibi is built on one of the lower "benches" of the third mesa. The sands have drifted over the bench toward the north and northwest, forming large hills, which have all been covered with peach trees. The peach, vegetable, and melon crops are worth at least \$10,000 per year. The Indians eat great quantities of the peaches when ripe and dry the remainder for winter use.

VALUE OF THE MOQUI REALTY.—The total estimated value of the Moqui realty only includes the area they now use. There is water enough to irrigate 6,000 acres more of agricultural land, which would be worth \$40 per acre, or \$240,000. Besides, the grazing lands adjacent would be greatly benefited.



Julian Scott.

THE APPROACH TO THE VILLAGE OF ORAIBI, THIRD MESA, ARIZONA.



Julian Scott
1891

A STREET SCENE IN PUEBLO OF ORAIBI.

The Moquis farm 3,600 acres of corn land. They have water for this, and these lands are cheaply estimated as of the value of \$30 per acre (the water being the real value), or \$108,000.

They have 1,000 acres of peach orchards of a value of \$20 per acre, or \$20,000, and 2,000 acres of garden land, at \$30 per acre, \$60,000; but the water, making cultivation possible, is the real value; in all, \$188,000.

This estimate of value of the lands is based upon the common and average value of lands of like character in New Mexico and Arizona adjacent to the Moquis, and in view of the fact that considerable outlays for ditches and irrigation will be necessary. Similar lands with water are held in New Mexico and Arizona at from \$40 to \$50 per acre, and more when buildings are included.

The value of the houses is nominal; still, they are homes. The springs about the Moqui pueblos constitute the value, as water commands the lands. About the first mesa, near Sichumnavi, Tewa, and Walpi, there are three springs, and 3 miles beyond to the north, at Conellabah and Weepo, 1 each, and a mile and a half northeast of Weepo, at Mishongnavi, 2; at Shipaulavi, 1; at Shimopavi, 3; at Oraibi, 5 small ones. There is a spring at Keams Canyon post office, 1 at the school, 3 miles northeast, and 1 near the ruins of Awatubi.

HOUSES AND POPULATION OF THE MOQUI PUEBLOS.—The total number of houses in the 7 pueblos is 347. It is difficult to count the houses in any of the 7 Moqui pueblos, there being three ways of counting them, all of which might be correct, yet varying greatly in numbers. For instance, there are 5 long rows of buildings at Oraibi, each row divided into from 28 to 41 sections, and nearly all 3 stories high, thus: first row, 32 sections; second row, 41; third row, 28; fourth row, 30; fifth row, 29; total, 160.

Some of these sections accommodate more than 1 family; then, if the 5 rows be regarded as so many tenement houses, each section could be counted as 2 or 3 houses, but they were estimated in sections and counted, as the houses in our large cities are numbered, thus:

PUEBLOS.	Houses.	Population.
Total	347	1,996
First mesa.....	81	496
Walpi	33	232
Sichumnavi.....	21	103
Tewa	27	161
Second mesa	106	595
Shimopavi.....	38	225
Shipaulavi.....	26	126
Mishongnavi.....	42	244
Third mesa (Oraibi)	160	905

The individual landholders number 285, the areas being from 1 to 16 acres, as follows:

AREAS OF INDIVIDUAL HOLDINGS OF LANDS FOR FARMING, 1890.

PUEBLOS.	AREA OF HOLDINGS (ACRES).														Total individual landholders.
	1	2	3	4	5	6	7	8	9	10	11	12	13	16	
Total.....	37	19	49	37	26	33	16	28	7	6	1	23	2	1	285
Tewa.....		3	1	1	1	2	2	5				6			21
Sichumnavi.....	1	4	5	2	1	2		2	1						18
Walpi.....		1	8	3	1	6	2	3	1	1	1	1			28
Mishongnavi.....			8	9	4	6	2	5		2		4			40
Shipaulavi.....		1	3	2	3	3		3	1			2	1		19
Shimopavi.....		1	5	8	8	7	2	3	2	2		2		1	41
Oraibi.....	36	9	19	12	8	7	8	7	2	1		8	1		118

The men are the landholders of the mesas; the women are the house owners in the towns on the mesas.

REPORT ON THE MOQUI PUEBLOS OF ARIZONA.

BY JULIAN SCOTT, SPECIAL AGENT.

About the residence of Mr. Thomas V. Kean, known as the Tusayan trading post in Keams Canyon, daily collect groups of Indians from various tribes, trading posts, near and far, Navajo, Moqui, and the Oraibi generally, Cojonina, Zuni, and Laguna occasionally, from the plateaus of the north, mesas of the west, and butte country in the south. They come afoot, horseback, on burros, and on mules, bringing with them hides, blankets, baskets, pottery, dried peaches, melons of all kinds, gourds, pumpkins, beans, and corn for barter and trade; others come for social purposes, gossip and news, to meet old friends, to engage in popular sports, horse and foot racing, and in games of chance, like monte and koon kan. Men, women, and even children engage in these pastimes, and, what is quite remarkable, I never saw any quarreling among them, and their tempers were often put to severe tests. The dissimilarity in costume of these various tribes is not easily noticeable till after long observation; while generally similar, they are quite unlike in detail; for instance, while all the men and boys wear red scarfs, 2 or 3 inches wide, around their heads, tied in a simple knot at the side, the Navajos gather all their hair at the back and tie it in a vertical bow of two loops, low at the neck; all the others gather only their back hair into a similar knot with the front parted or in bangs above the eyes, the side locks hanging loosely over the ears and cheeks down to the shoulders. The Navajos seldom wear head covering, except when necessary, and then the blanket is drawn over like a hood. The Indians of all these tribes, viz, Navajos, Moquis, and other Pueblos, wear variously colored, tightly fitting calico shirts, loose trousers of the same material or cotton, falling just below the knee, and slit on the outer sides from the bottom, about 6 inches upward, forming flaps, through the openings of which the knees are seen and leggings of buckskin, reaching up to just below the knee, overlapped and held in place by broad, gay colored, and fringed garters, woven by the Moquis and Navajos, tied above the calf in a bow or square knot, according to fancy, the lower part of the leggings falling loosely over the moccasins. The moccasins are of plain buck or cow skin, either of a natural color or dyed black or brick red; the vamp reaches to the ankle, the quarters or sides extend a little higher and pass across the front; the button fly folds over the outer quarter and fastens just above the heel. Added to this description of their attire, I must mention the blankets, which are of various designs and colors, of Navajo, Moqui, Anglo-American, and Mexican manufacture; they form not only an indispensable part of the Indians' wardrobe, but also serve as their bed covering at night or day, whatever time they take for sleep. The blanket is generally wrapped about one its full length, covering the head and falling below the knees, and is girdled about the waist by a cartridge belt, or by the more ornamental and expensive belt made by the Navajo silversmith. When not used for shoulder or head covering, the upper part is allowed to fall and form a double skirt, which falls gracefully about the legs. These Indians wear beads of every kind, homemade, and principally of shell, turquoise, and silver. The commercial value of the shell beads is gauged according to their thinness and to a special pink color or tint they possess. The value of the turquoise beads is gauged by the delicacy and purity of their blue shade, while that of the silver beads, including all other silver ornaments, is determined by weight. (a) The ornaments made of these beads, consist of necklaces, earrings, and bracelets. Other ornaments, beautifully engraved, such as buckles, belts, buttons, and also bracelets, are made of solid silver. They do not care for gold ornaments.

I visited the pueblos of the vicinity, going into many of the houses.

The Moqui houses generally can be termed "rough rubble" masonry, being of rough, uncut sandstone, laid in blue or dark mud, all from and about the mesas. The stones are usually about 10 inches square. The house roof is made of peeled pine poles from 6 to 8 inches in diameter, laid from wall to wall and about 15 inches apart. The rooms are from 8 to 10 feet square and the ceilings low, say 7 feet. The connecting doorways between the rooms are sometimes but holes, 4 feet high at most. Over the ceiling rafters or joists, which have a slight pitch or fall, are laid small cedar branches, side by side, like a thatch. Over these is the fiber of the yucca, which makes a matlike covering, and on this is laid the mud which makes the roof, say a foot deep. The walls of the houses project above the roof a foot or more, and sometimes outlet holes are in this parapet, through which the little water which comes from rain runs out. Some of the houses have long split logs inserted in these holes for drain pipes. When a Moqui wants to repair the roof of his house he simply shovels upon it a quantity of mud. The floors of the houses are rock for the first story and mud for the others, laid as in the roof. The joists in all the houses are similar. The fireplaces are in the corners of the rooms usually, with flues (this is modern, however), but some are still in the center, the smoke-escaping through the square hole in the roof. In many of the houses old jars of pottery are used for chimneys, the bottoms being knocked out and the jars piled one on the other. Sometimes piles of stone or boulders make the chimneys.

The houses of the 7 Moqui pueblos are similar to those of the pueblos of New Mexico in general features, except that the former are of stone, while most of the latter are of adobe. The interiors and sleeping arrangements are about the same, and the methods of making bread and cooking food of both the Moquis and Pueblos are the same. Some articles are found among the Moquis made by the Mexicans or Navajos or bought from the Mormons, who are their neighbors on the northwest. Some few Moquis have lamps and cooking stoves.

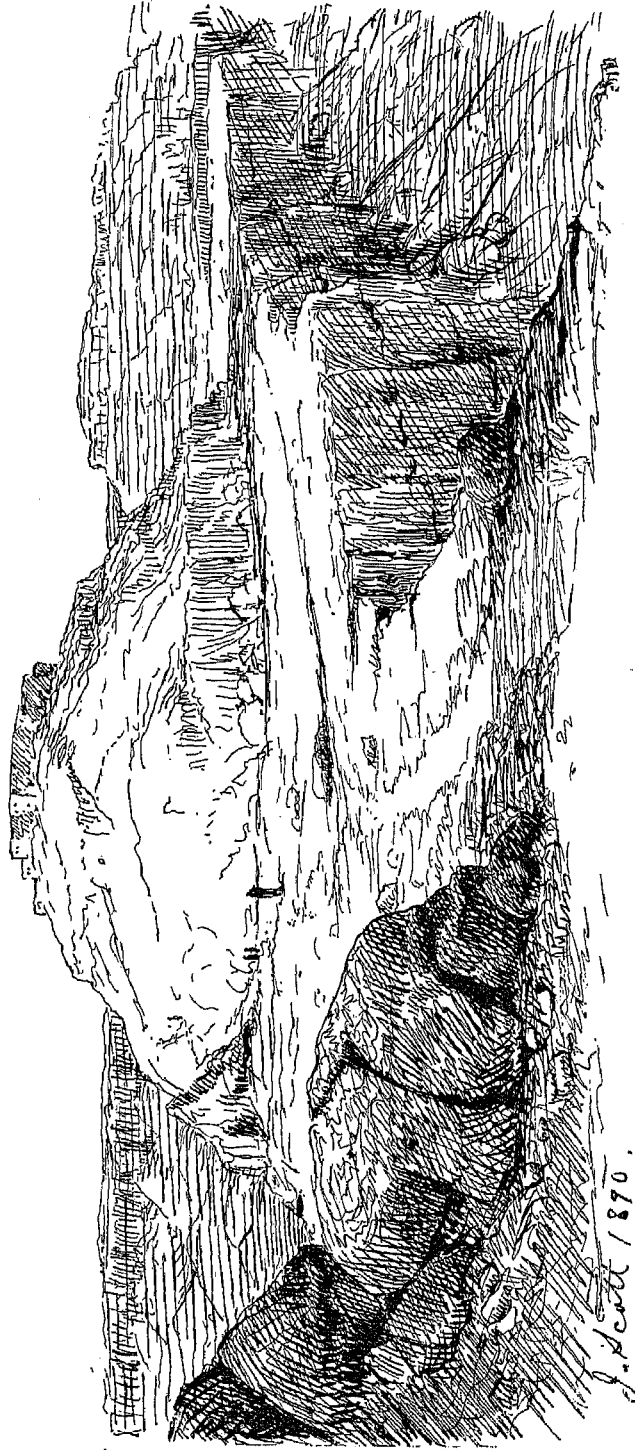
a The usual rule with the Indians of this section is to charge \$2 for jewelry containing \$1 of silver.



Drawn by Julian Scott, 1890.

MOQUI IDOLS.

1. A male cachina, 10 inches high.
2. A female cachina, 14 inches high.
3. Clay god, 4 inches high.
4. Moqui boomerang.
5. Clay god, $4\frac{1}{2}$ inches high.
6. Headdress of a goddess, 9 inches high.
7. A board representing a female cachina, 30 inches high.



SHIPAULAVI, second mesa, Arizona, 1890.

While age and neglect characterized their exteriors there was a neatness and cleanliness inside agreeably disappointing. The rooms, plastered with mud generally, were small and dimly lighted, making it difficult to notice details, though some had windows of gypsum for glass. From the ceilings were suspended poles, upon which hung dried meat and strings of peaches and dried pumpkins. Pieces of deer horns were driven in the walls and used as hat and coat racks. The fireplaces were small, generally built in a corner, and answered for both heating and cooking. Here and there in the walls were niches of different sizes, which served as storing places for crockery, trinkets, and clay gods. Some of the rooms had low stone seats running along one or two sides, which were covered with goat and sheep skins and blankets to make them more comfortable. These, rolled out on the floor, are usually the beds of the Moquis. Occasionally there would be an ordinary chair or two and a pine table. The floors were of clay or cement. The ceilings were low, not more than 7 to 8 feet, and the inside doors, or connecting ones, say 4 by 3 feet.

Every family possesses facilities for grinding corn, and in most of the houses we entered were found one or more of their young women kneeling behind low bins containing inclined stone slabs (*metátes*), on which they were grinding corn into meal of different grades of fineness. They bake a bread from this corn meal, called *wyavi*, or *piki*.

The houses being one above the other in terraces, the roof of the lower is frequently the front yard of the upper. They all extend back to the same rear wall. The caps and sills of some of them are made of sandstone. Ladders are used to reach the higher dwellings, and I am told that until recent years the lower houses were entered from the top; those having roofs to the sky have a square hole for light and air and exit. We found nearly all the terraces and upper roofs covered with ripened corn of every color; they also dry their peaches on these roofs. We were here shown more *piki* (bread) made of the colored corn, which they bake on flat, hot stones, the color of which the process of baking did not change.

On the outer walls of the houses, and over the windows and doors, hung in graceful festoons and small bunches ripening chili, in color from emerald green to brilliant scarlet. Old water jars, whose bottoms had been worn out, were worked into their chimneys with the other masonry, giving them quite a tasteful appearance.

In every household can be seen from one to a dozen wooden or clay idols or gods of the oddest and quaintest shapes, roughly made, and while resembling each other, they are different from any other Indian images. They are of all sizes, from 2 inches to over 4 feet high, painted in various colors; sometimes they are invested with beautiful ceremonial robes, woven expressly for them. These gods are not, properly speaking, gods at all, but represent different *Cachinas* (or *Katcheenas*), who are but semigods and intermediaries between the Moquis and their principal deity.

The gods made from trunks or limbs of small trees which by chance have grown to resemble in part a man are regarded with great favor, especially for gods for the *estufa*, it being believed that the spirit of a *Cachina* is in such wood. The material employed in making the *Cachinas* is usually cottonwood. Such as have ceremonial vestments are of wood, the clothes being of white cotton cloth, richly embroidered in colors; the cloth used is from the Moqui looms and is of a peculiar fabric; clothes, including headdress, are also made of feathers. The colors employed in painting these gods are used as each individual fancies. (*a*)

The Moquis have a great number of dogs. These dogs, like the children, climb the ladders and narrow stone steps from roof to roof with the greatest ease, likewise the cats, here in large numbers.

We came to a bevy of girls, collected upon one of the housetops, appearing in full dress toilet, the most noticeable feature of which was their tunics, each of some bright color, red, green, and yellow being the favorites, worn gracefully about the shoulders. The hair was arranged in the peculiar cart-wheel side puffs. Their simplest dress consisted of a small blanket brought close under the left arm with the two upper corners fastened over the right shoulder, the side edges being tied beneath, forming an arm hole, leaving the right and left arm, left shoulder, and part of the left breast bare. It is girdled at the waist by a belt of their own weaving, and closed down the side either with colored yarn or silver pins. Some of them wore leggings peculiar to the Moqui and Navajo women, each consisting of an entire deerskin, wrapped in spiral folds from over the moccasins upward to the knee and there fastened in some mysterious manner.

The *estufa* bears more relation to the life and customs of the Moquis than churches or clubhouses do to the Anglo-Saxon. The ordinary *estufas* are simply underground rooms. Some are sacred, some are for lounging, some for work. They are used by the males, and are usually from 12 to 16 feet square. Some, however, are parallelograms, and from 8 to 10 feet high. They are sometimes walled inside with stone, and have beams of cedar or cottonwood laid across them, with an opening 2 by 2 or 2 by 3 feet left in the ceiling or roof for a ladder. This is the only means of ventilation. The roof or ceiling beams are lagged in with other beams or thick brush, and dirt is thrown over all. The floor is sometimes laid with stone, sometimes with mud, and around the 4 sides of the room are stone benches. One of these benches is usually constructed so as to form a table for the ladder to rest on.

a About the heads of some are coronets of 5 or 6 small squares of wood. These coronets sometimes resemble a Maltese cross, with a near approach to a Grecian border on them, the lines being in green. The bodies of the wooden gods are usually painted white, and frequently a bit of the down of a feather is glued to the points of the coronet, which may be a symbol, copied from the halos around the heads of the images of saints in Catholic churches. The Spanish Catholic influence is quite apparent in many of the Moqui images, and also in some of their customs, on their pottery, and in figures on their blankets.

In the center of the room is a place for a fire of wood, with several stones 10 by 12 inches or larger lying about it, which are used for seats. The walls contain niches for idols, and on one side is a pole about 6 feet long, suspended 2 feet from the ceiling, hung with rawhide, to which the weavers attach their blankets when weaving. The estufas are sometimes decorated by the different orders, septs, gentes, or clans, but usually they are clay or stone lined, sometimes whitewashed. The ladders are made of wood, with loose rounds.

The estufas where the men hold religious ceremonies do not differ much from the ordinary estufas. They are also underground rooms, usually oblong in shape, 12 to 14 feet wide, 18 to 20 feet long, and 10 to 12 feet deep. They are reached by descending a ladder through a narrow opening or hatch. These places of worship are destitute of any kind of furniture. On 3 sides are usually built stone benches, where the men sit; the floor is covered with large flagstones, and a small pile of ashes, almost under the hatch, is generally to be seen, where the fire has been kindled when needed. There are niches in the walls, in which masks and wooden gods are stored when not in use. The only source of light to these sacred places is through the opening at the top, which is also the only means of ventilation.

Many picture writings were observed on the rocks about the mesa, and afterward many were observed at the second or western mesa and about Oraibi.

In some of the excursions I made into the desert and to the mesas I frequently came across large herds of Navajo sheep and goats, always attended by women and children acting as herders, together with a large number of dogs, far from their own reservation, monopolizing the feeding and watering places belonging to the Moquis. These Navajos, with their herds, roam up and down the canyons and over the plateaus to the Tusayan trading post, and spend days along the mesas skirting the canyons, occupying all the little side canyons that have water, and their hogans are found near all these points, which they appropriate. They overrun the Moqui lands at will.

I visited the Moqui school at Keams Canyon several times, examined all its buildings, and found them in excellent condition and kept in the most perfect order, everything appearing to be under good management and wholesome discipline.

The Moqui people are rich in legends and folklore. They have their stories of giants, giantesses, hobgoblins, fairies, and all kinds of spirits, which they believe once lived and inhabited the earth in time long since gone by. Every cliff and mesa, every mountain and canyon, has some story attached to it which the natives treasure with care. All these legends, traditions, and stories are transmitted, orally, from generation to generation, with minutest exactness of circumstances and detail. A child in telling these stories is attentively heard by its elders and quickly prompted if it makes a mistake in any particular; so we can feel assured in reading any of these legends received directly from these people that they accord with the true, literal Indian version. These people also have their superstitions and their belief in ghosts.

All the Moquis have peach orchards, which are situated at the foot of the mesas in protected spots; the young trees are surrounded by stone walls to keep them from the ravages of the sheep and goats. Some of the orchards are inclosed within high walls. One can hardly imagine the amount of labor which has been expended upon a peach tree which has attained its full growth. Apricots are also cultivated, and gourds, pumpkins, corn, beans, and a great variety of watermelons. Peaches are dried for winter use, and watermelons are kept, through the dryness of the atmosphere, as late as March. The crops are gathered and owned in common. Each family gets its portion and the rest is stored for the common use.

During the season of planting and growing many of the men and boys, in order to protect their crops from the wandering herds of the Navajos, crows, ravens, and cutworms, temporarily live in brush houses by their fields, some of which are far out in the desert, along the washes where the ground is sure of natural irrigation. After the planting these men spin yarn and weave blankets, sashes, and other articles of wearing apparel, a most unusual occupation for a male Indian and unknown in other tribes, except in few instances. The people of the first mesa are skilled in making pottery. Those of the second mesa and of the Oraibi are noted for their fine willow and large coiled basket work.

After their harvest their religious ceremonies begin, in which they thank the Great Spirit for blessings vouchsafed to them, and ask that the coming days be prosperous; that drought, famine, and pestilence be kept away, and that the supposed ancient prosperity and mighty condition of their race be ultimately restored. It is evident that they are hardworking people, for almost every moment of their time is spent in obtaining the necessities of life, as they are poor and in a barren country. A day now and then is appointed for sports, which only the men attend, dancing (*a*) and horse racing, the latter being the principal outdoor sport. For the horse

a In 1889 Mr. C. R. Moffet attended a tininina, or social dance, given by the young men of Walpi. He thus describes it: "We made our way through the intricate windings of the narrow streets to nearly the opposite side of the village, where we found about 40 men assembled in a long, low, and narrow hall. As only one very poor dip was burning, and as the only opening through wall or roof was a very low and narrow door near one end, it is safe to say that the lighting and ventilating of their ball room was not first class. The dancers had removed all superfluous clothing, and it was extremely ludicrous to see an Indian come in and, after quietly greeting those present, with great dignity take off his shirt and hang it up, just as a white man under similar circumstances would remove his overcoat and hat. The musical instruments were a tom-tom, made of a section of a hollow cottonwood log, one end of which was covered with dried mule skin, a number of gourds filled with pebbles, and, wonderful innovation! a half string of sleigh bells. The pebble-filled gourds and the bells were rattled and the tom-tom, beaten with a heavy stick, came in from time to time like a bass drum, and the dancers, in a long single file, kept time. First but the right foot of each moved to the



NA-JI (Nah-hee) citizen of Mishongnavi, second mesa, Arizona, 1890.
LA-LO-LA-MY, chief of the Oraibi, Moqui Pueblo, Arizona.

racing they go into the desert and select grounds at a point where they can be seen from the mesas, and when the day arrives the men all come mounted on their best ponies, dressed in a variety of costumes, some in the cast-off clothing of the white man, some in only a "gee-string" (breechcloth), eagle feathers, a pair of moccasins, and an old hat, some tastefully and others most gorgeously arrayed in finery of their own invention and manufacture. When the races open the people form two lines, facing each other, the distance between them being about 30 feet. Usually but two race at a time. Those entering the contest ride away 300, 400, or 500 yards, to some point agreed upon; then, turning, they dash forward, riding to and between these lines to a lariat, which has been drawn across from one side to the other. All the spectators act as judges. There is never any dispute as to the result of a race, no matter how much has been staked upon it, one way or the other. The wildest demonstrations of delight are indulged in by the winners, and the losers join heartily in the general hilarity.

The Moquis bury their dead with much ceremony. They do not put them in boxes or coffins, but wrap them in blankets and lay them away in the rocks with bowls of sacred meal, meat, water, corn, and fruits. This is not done from any superstitious notion that these things are going to be of any use to the dead, but because they are symbols of certain ideas. The women are the chief mourners. The great altitude of the town with the consequently rare and pure air prevents odors.

Their form of courtship and marriage is very simple. In this part of their life neither priests nor civil officials have anything to do. When a young man seeks a wife he pays court to a maiden of his own choosing, and if he is favored she sends him a basket of variously colored piki, or peky, which signifies that she is willing to marry him. Then he, with all his people, visits her family and they have a little fête. This is returned, when the young man goes away with the girl, now his bride, and lives in her house. These people are very moral and hold in most sacred regard the family life. They do not marry sisters or cousins, and they invariably go out of their family or gens to select wives or husbands.

In visits paid to the different Moqui pueblos, or villages, I frequently met with Indians of other tribes who had come for trade, and who were objects of interest on account of their great dissimilarity in costume, manner of dressing the hair, and painting their faces. The Moquis as a rule do not paint their faces except for ceremonials. There were Apaches, Utes, Piutes, Navajos, and Cojoninas. The latter Indians deserve special mention. There are but few of them now, and their home is at the bottom of Cataract Creek canyon, one of the side canyons of the Great Colorado. They live in houses of stone and earth, which I am told are built like those of the Moquis. They make the beautiful willow baskets, which are deep, and so tightly woven that they hold water. They are like the Apache baskets, only the designs worked in them are of 1 color, black, while the Apache baskets are of 2 colors, black and red.

From Moqui, or Walpi, to Holbrook the road passes many old ruins, which came into view every little while high up on the mesas. These mounds, sometimes walls covering acres, were ruins when the Spaniards first came there. Ten miles or so to the south, and at our right, overlooking that part of the desert where the "Giant's Chair" is situated, is Awatubi (meaning high rock), probably the most picturesque of all these ruins. The Navajos call it Tal-li-hogan (singing house). It is supposed to be one of the 7 Moqui towns of the ancient province of Tusayan, which have been supposed by some to be the "7 cities of the kingdom of Cibola", and a part of the walls of a church built by the Franciscan monks and Indian slaves are still standing in a good state of preservation. Some of the walls of the houses, too, have outlived the storms, and could to-day, with a little repairing, be utilized for places of abode. I was told by the Indian Nah-ji that the people of Awatubi became very bad and put to death their chief and the members of his family; that 4 years from the time of this revolt the men of the other 6 pueblos entered the city while those of Awatubi were engaged in religious ceremonies in their estufas, and that at a given signal fired brush, which they had brought with them, was thrown into the estufas, together with chili (red pepper), which greatly aided in the suffocation of their victims. Those who attempted to escape were brained with stone axes. They then killed all the old women, sparing the young children, who were divided among the other pueblos. The town was completely destroyed and has not since been used as a human habitation, unless temporarily by some nomadic Navajos.

All evidences of the Spanish invasion and possession have passed away excepting a few remains of old buildings, probably churches, judging from their dimensions. One of these, under Shimopavi, just south, is a mission, or church, with walls from 4 to 6 feet thick; they now form a part of a large sheep corral. Other Spanish ruins lie among the ruins of Awatubi. All other evidences of this occupation have disappeared, except now and then small ancient silver crosses of strange shapes, which the Indians wear among their beads.

music, then both feet, then both feet and one arm, then all the limbs, then the head, then the whole frame fairly writhed. The line slowly retreated to the back of the hall, but at once advanced with ever accelerating speed, ending in a terrific bound. All this in perfect unison, keeping time to the music, all the dancers chanting the story of their tribe. First, low and plaintive the song, telling the death of some renowned chief, or great misfortune of their people; then higher, telling of the capture of whole herds of deer, and antelope, and big horns, by their mighty hunters; then higher, ever higher, telling the adventures of their brave warriors on the fields of strife, and ending in a terrible yell, that marked the close of a wonderful exploit of some death-dealing chief. The wavering light, the shadowy corners, scarcely lighted at all; the rattling bells and gourds, and the mournful tom-tom; the long line of nearly nude Indians, their long hair streaming out behind, marching, bounding, writhing, and wildly tossing their arms; and the strange song, now soft and low, now loud and force, formed a scene oppressively weird, and never to be forgotten. The tininina ended at about 10 o'clock."

Tewa, the present seventh town, was built after the expulsion of the Spaniards as a home for some hired fighting men, who went there and settled with their families. The Navajos, Utes, and Apaches had constantly menaced the Moquis, who were and still are a very peaceable people, as the name they call themselves implies, Ho-pi-tah. It was for a better protection of life that they built their houses on the mesas. Their fields were always in danger of being despoiled by roaming bands of one or the other of these tribes, and their condition became distressing. Finally, in their extremity, they secured the aid of some Indians from Tehua, on the Rio Grande, who took possession of the new village and gave it the name Tewa, as it is now spelt, the "w" substituting the Spanish "hu". The village had been provided for them and was one of the inducements offered to get them. Besides their dwellings all the other necessities of life were furnished, and the Tehuas were not obliged to perform any other duty than that of protecting the Moqui flocks, herds, fields, and orchards against the incursions of their enemies. The Tehuas were inured to war and proved a valuable auxiliary to their old kinsmen, with whom they were destined to become more closely united. It is nearly 200 years since they became a part of the Moqui establishment, marrying and intermarrying and speaking the Moqui tongue, yet in all this time they have preserved their own language in toto. The descendants of these Indian military families are farmers. They show a pronounced difference in their bearing from the pure Moqui, and as a general rule are taller and broader. They are foremost in all things that pertain to their future good, and were the first to leave the mesa and build new homes more convenient to wood and water and their fields. They have from the beginning encouraged the school that has been established for the Moquis at Keams Canyon. Polaki is their principal man, or chief, and in him is typified the force and energy of his race.

The Moquis have been led to believe that all who would leave the mesas, that is, their old homes in the 7 pueblos, and come down and build new houses in the valleys would be provided roofs for their houses by the government. This encouragement or statement has brought down more than was expected and more than roofs can be provided for. To get nearer water is one of the inducements, if not the principal one, for them to leave their old homes on the mesas, and they can not understand why they should have been asked to come down if they are not to be close to the water. They claim that by this allotment no benefits in that direction will be derived. They also desire to build and live in small communities, but some of the walls which they have put up to this end have been pushed over, and their wishes in this respect disregarded. The springs which they have always had continue to be their only supply.

The Moqui men say that they begin to think that the promises of the nation and white men to develop new water sources or improve the old ones are lies, and that after all, the so-called efforts to help them are only schemes for the ultimate dispossessing them of their old homes and lands, where for centuries they have lived, following the peaceful habits of agriculturists, never asking any other aid from the government excepting that of protection against the Navajos. There is grave danger here of a charge of bad faith. The United States can best aid these people by expending a few thousand dollars to develop their water supply and put them in the way of planting quick-growing trees for fuel and timber. In other matters, save schools, it is wise to let them alone. They now feed and care for themselves but the future water and wood supply should be undertaken by the nation. \$15,000 expended judiciously now will settle these things.

There is evidence of an abundance of water about all the mesas, but the springs are not properly developed, and at present there is a great waste of water; there being no reservoirs to keep or store the water it easily percolates through the earth and sand to the lower rock benches beneath the drift, and so is lost.

At intervals along the foot of the first mesa there are 11 well-known springs; at the second, 18, of which 14 are about the spur upon which the village of Shimopavi rests.

Oraibi, on the third mesa, and the largest of all the pueblos, has comparatively the smallest water supply, there being at the present time but 5 springs to furnish its large number of inhabitants with this great necessity.

There is, however, a present greater necessity than lack of water confronting these peaceful and industrious people, that is fuel. The mesas for 7 to 12 miles around have been completely denuded of every vestige of wood or timber. They now have to go to remote canyons and distant mesa tops for their supply. The idea of planting trees, except those that bear fruit, has never occurred to them. The parts of the table-lands the Moquis cultivate, as viewed from the mesas, seem but little specks of green in the vast areas of sandy waste.

The agent of the Navajos is also the Moqui agent.

The country immediately about the Moqui towns suggested the name for this region. Leaving the table-lands and passing down to the lower levels the surface becomes more broken, with here and there lonesome looking buttes. The Navajos called all this section "Ta-sa-un", meaning "isolated buttes", and the Spaniards christened the country the "Tusayan" and called it the "Province of Tusayan".

The Moquis are an entirely peaceful and industrious people, self-sustaining, supporting themselves by agriculture, stock raising, and the manufacture and sale of pottery and basket work. The villages, or pueblos, are from 700 to 800 feet above the valleys, and wood has to be brought by men and donkeys, or burros, a distance of 6 to 8 miles, while water, obtained from springs at the bottom or base of the mesas, has to be brought by women.



WOMAN OF TEWA, Arizona, first mesa. Arizona, 1890. Moqui.

in jars 1 to 2 miles, up well-worn paths along the sides of the mesas to the villages. Their supply of water depends entirely on the continuance of the wet or rainy season. Snows begin in and about the high mountains in December and continue until February. The rainy season commences about the middle of July and lasts until September. Sometimes, after a rain, a little dew is noticeable in the morning, but only for a few days or until the surface water disappears. It can not be said that the water supply increases or decreases. There are many springs adjoining the mesas, which, if properly developed, would more than treble the present water supply. Their corn and wheat fields are along the water washes and in the valleys. Both cereals are planted in hills, the corn irregularly, from 5 to 6 feet apart, the wheat about 18 inches apart. A primitive planting stick, say 2.5 feet in length and 1.5 inches in diameter, with a projection about 12 inches from the end and 4 inches long, on which they place their foot to force the stick in the ground, is mostly used in planting. In using it they dig down to where the sand or earth, as it may be, is moist; then the seed is deposited and covered up. Small brush houses are built near the grain fields, in which watchers remain during the growing season to keep off the ravens and other birds. A few of the Moquis use modern hoes, beyond which they possess no implements for farming. Melons of all kinds, squashes, pumpkins, cucumbers, beans, and chili (pepper, used in all their stewed dishes), are planted in groups, the seeds being dropped in the holes made by the stick beside the corn and wheat fields. Peach orchards are plentifully sprinkled among the rolling sand hills which bank up against the sides of the mesas. Some are planted on the top of the mesas, where there is sufficient earth and sand to hold moisture. At Shimopavi and Oraibi, particularly at the latter place, at the north and west of the town, there are a number of large and thriving peach orchards, which, until our last visit, had been usually considered the only Moqui peach orchards. On the first mesa, about 1 mile north of Tewa, are 2 large orchards covering from 3 to 5 acres, and 3 miles further north, on the west slope of the mesa, there are fully 20 acres of peach trees of great age and still yielding abundance of fruit; the trees are planted along lines on the walled terraces, which are daily watered through small ditches running along each terrace, ingeniously contrived to receive and distribute an abundant supply of water from a large spring up and under the first bends of the mesa. This spring is called "Co-nell-a-bah", sheep spring.

The Navajos have made frequent raids upon this place with their herds, so that there are now acres of peach orchards gone to waste through the destruction of portions of the terraces and trees. These terraces are all on the north side, from which direction the Navajos come.

A mile to the north of Tewa, around a spur of the mesa, are the terraced gardens of Weepo (onion springs), where the water supply is quite as great as that of Co-nell-a-bah. These gardens are used by all the Indians of the 7 pueblos or villages. There are hundreds of acres of these peach orchards, and they are found in the most out of the way places, wherever there is sand which will hold moisture. The sands have drifted over some of them so deeply that the tree trunks are lost to sight, the limbs emerging like the blades of the yucca plant from the drift about them. It is impossible to accurately state the aggregated acreage of these orchards, and equally difficult to estimate the actual acreage of their cornfields. It is believed that between the 7 pueblos or villages there are 3,000 to 3,600 acres of corn lands, and there are certainly 1,000 or more acres of peach trees. I should have said the peach orchards are set out very much as those in the east, and are grown from the pit. Great care is required in preserving the young trees from the goats and burros, or donkeys. Stone walls are built singly about each young tree, and brush is then piled over these; even after this provision much care is required, frequent watering being necessary if the season is a dry one. The stone inclosures and brush also serve to keep the sand from drifting over and burying the young trees. The Moquis have about 2,000 acres in vegetables.

All of the 7 pueblos or villages are under the chieftainship of one man, whose title is hereditary. He is assisted by subchiefs or principal men, one or more of whom live in each village. To the council of chiefs the medicine men, or priests, are always invited, and they have a voice in the discussion of all subjects that come before the council. The principal priests, that is, the heads of the different orders, such as the antelope, snake, bear, and beaver, elect their own successors, imparting to them during their last days the carefully hidden secrets so potent in their religious ceremonies. Their successors are usually chosen from their own family or gens, and they are instructed from their youth in the mysteries of the particular order into which they may be initiated up to a certain point, beyond which none of the final rites are revealed until their predecessors select them to take their exalted places.(a)

^a CLANS OR GENTES AMONG THE MOQUIS.—The great difficulty experienced by anyone on visiting the Moqui towns is to get some one to talk with him. Now and then a Moqui may speak a little English and some Navajo or Spanish. These people, while obliging and good natured, are not very communicative as to their inner life unless they see a chance for trade or to receive money for their conversation. Unless their antecedent history is known one might as well be in the midst of a desert. One might remain with them 10 years and find out but little unless he knew their language, or learned it, or fell in with those who knew it and could speak English. The Moquis are cunning and will fill the listening ear with wonders if the palm is crossed. They like silver, both the color and the coin. One can suggest a form, theory, clan, or gens, and the Moquis will supply what is wanting. How much of what is thus obtained from them is true is a query. In writing of gens, Lewis H. Morgan, in his "Ancient Society", 1878, says of the Moquis: "In some of the tribes, as the Moqui village Indians of New Mexico (Angoria), the members of the gens claimed their descent from the animal whose name they bore, their remote ancestors having been transformed by the Great Spirit from the animal into the human form". Captain J. G. Bourke, in "The Moquis of Arizona", says of the clans or gentes of the Moquis: "The clans or gentes of the Oraybi [Oraibi] Moquis are almost identical with those of Suchongnewy [Suchumnavi]. Nahivehma [Nahli] said that in Oraybi there is a crane gens, but the oak and road-runner gentes are both extinct". Bishop Hatch, of the Mormon church, insisted that while he was in Oraybi there was a sacred family among the Moquis; he said that there was a widow, whose infant son, not over 4 years old, was upon every feast day or occasion of ceremony loaded down with beads of seashell, chalcihkinitl, abalone, and everything else precious in the eyes of the Moquis. Concerning the clans or gentes of the Moquis, Bishop Hatch says: "I give the following lists, obtained at different times, and varying slightly from the inability of different Moquis to give the correct Spanish for each clan name or my own inability to understand them. Surgeon

The Moquis are subject to all the diseases common to other people. Pestilence more frequently breaks out among them than among nomadic Indians, owing, no doubt, to the accumulated filth about their villages. While their houses are neat within, their streets are common cesspools. All corners and covered ways are the conveniences, the outhouses and water-closets of well regulated homes. Ollas of urine stand in front of every house (the urine is used for dyeing purposes), so it is easily imagined that the atmosphere they constantly breathe while within the walls of their town is poisonous and death dealing. They have doctors who are skillful in the treatment of simple ailments and some of the diseases. These doctors may come from among the medicine men, or priests, and they may belong to the council of chiefs.

Herbs constitute their only medicine beyond the sun bath and prayers. The women attend to all cases of childbirth.

The Moquis, as already stated, bury at the foot of the mesas in walled graves, where, wrapped in blankets, their dead are laid away, first covered by slabs of stone, over which earth or sand is thrown. Burial bowls containing corn and other eatables are buried with them, but not because of a belief that they will benefit the dead, but to symbolize some of their religious beliefs.

The Moquis, male and female, are, as a rule, small in stature; the average height of the men will not exceed 5 feet 6 inches, but there are some stalwarts among them. They are well proportioned, but their heads often appear overlarge, owing rather to the thick and vigorous growth of hair than to enlarged craniums. This growth of hair is undoubtedly due to their not wearing head covering constantly. While they generally possess finely-cut and regular features, many of them have heavy jaws and broad faces, though rarely large or coarse mouths. They resemble the Arapaho or Cheyenne more than the Kiowa or Comanche, and to the casual observer or stranger they all look alike, but close acquaintance with them shows that there is as great a dissimilarity in features among them as in other races. The women are, of course, smaller than the men, with broad, squat figures.

The custom the men have of banging their hair, with side locks parted from the top of the head and falling to the shoulders, their back hair gathered and tied in a knot low on the neck, contributes largely to the idea of similarity of features. The older men do not strictly follow this custom, but often neglect the banging and allow their hair to fall loosely about their shoulders and back, parting it in the middle on top. The hair of the male Moqui is exceedingly coarse, and only in rare instances is it any other color than a blue-black. The few albinos among them have flaxen hair, pink skin, and white eyes, which seem to move involuntarily; they are the most repulsive looking objects met with among the Indians. The women when young are lithe and rather pretty, but as they get older they become portly, though not clumsy. They have a peculiar gait, a waddle, inclining the body forward as though they were always about to step a little faster. This is attributed to the heavy burdens they carry on their heads, particularly water, which they bring from the distant springs lying at the base of the mesas, sometimes 3 miles away. For this purpose they use large, almost round jugs, which they make of clay and burn. When the jug is filled it is swung to the small of the back, and the strap fastened through the ears of the jug is brought over the forehead, and the long march homeward begins. Sometimes the jug is wrapped in a blanket and carried as with the strap, but this is done only when one or both of the ears of the jug may be broken.

Virginity is highly prized by the Moquis. The hair of the females, the decorations or marks on their pottery, and the method of their basket weaving indicate whether or not the Moqui women making the articles are childbearing. When a Moqui woman ceases to be childbearing it is said of her "the gate is closed". Their plaque baskets, used for holding and passing bread, are made of one continuous strand of colored braided straw,

Ten Brock, United States army, in 1862, compiled the following list: 1, Deer; 2, Sand; 3, Water; 4, Bear; 5, Hare; 6, Prairie Wolf (coyote); 7, Rattlesnake; 8, Tobacco Plant; 9, Seed Grass. Tegua Tom, in October, 1881, gave me the following names: 1, Water; 2, Toad, or Frog; 3, Sun; 4, Snake; 5, Rabbit; 6, Butterfly; 7, Tobacco; 8, Badger; 9, Corn; 10, Cottonwood; 11, Clown, or Dead Man; 12, Bear; 13, Coyote; 14, Deer; 15, Lizard, and 16, Road-runner. The Tegua Indians living in the village of Hano, or Tegua, with the Moquis have: 1, Sun; 2, Corn; 3, Snake; 4, Tobacco; 5, Cottonwood; 6, Pine; 7, Cloud; 8, Bear; 9, Parrot. Tom himself was of the corn gens, his father of the frog, and his wife of the bear. Nahivehna, Tom said, was a road-runner. The clans or gentes of the Moquis, according to an old Moqui, who expressed himself with great intelligence, although he spoke but little Spanish, are as follows. My informant, I must take care to say, was old Toch, or 'Moccasin', our host of last night. He said that he himself belonged to the boli, or butterfly, gens, that his wife and children were of the aguila, or eagle, his father was venado, or deer, and his son had married a quingoi, or oak, and his brother a lena, or ku-ga.

1. Boli.....	Mariposa.....	Butterfly.
2. Kueja.....	Aguila.....	Eagle.
3. Ku-nh.....	Maiz.....	Corn.
4. Chia.....	Vibora.....	Rattlesnake.
5. Sui.....	Conejos.....	Rabbit (1).
6. Honan.....	Oso.....	Bear.
7. Piba.....	Bunchi.....	Tobacco (native) (2).
8. Honani.....	Tejon.....	Badger.
9. Pa-jeh.....	Agua.....	Water.

10. Pa-kua.....	Sapo.....	Toad, or Frog (3).
11. Tajua.....	Sol.....	Sun.
12. A-to-co.....	Grulla.....	Crane (now extinct).
13. Shu-hui-ma.....	Venado.....	Deer.
14. Ku-ga.....	Lena.....	Firewood (almost extinct) (4).
15. Sha-hue.....	Coyote.....	Coyote.
16. Hupoa.....	Paisano.....	Road-runner (chapparral cock).
17. Quingoi.....	Eucina.....	Oak.
18. Oma-a.....	Nube.....	Cloud.

"(1) The Spanish word 'conejos' was given, but I am too well acquainted with the employment by the Indians of this word for 'liebre' (a hare or jack rabbit, and vice versa) not to feel it my duty to point out the uncertainty of the translation.

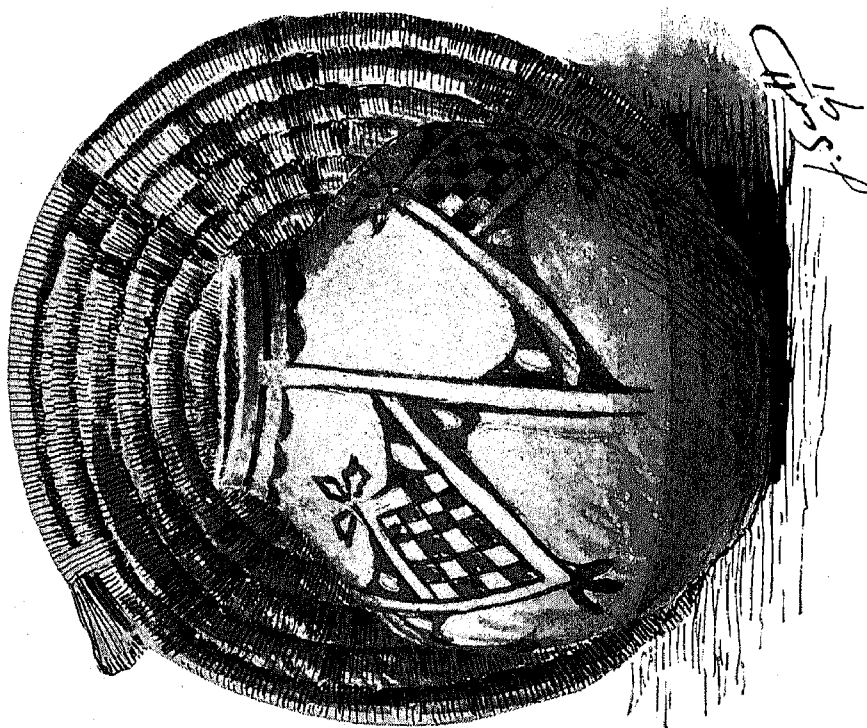
"(2) No. 7 is named from the 'bunchi,' or native tobacco, cultivated by all the pueblos of New Mexico and Arizona.

"(3) In like manner, the Spanish 'sapo' (toad) is used so generally by the Indians instead of 'rana' (frog), and I am so well satisfied that 'pa-kua' in the Moqui language means 'frog' that I have felt constrained to give that as the name of the tenth gens.

"(4) The Indian could not explain what this meant; he repeated 'lena, lena' (firewood), but whether 'alamo' (cottonwood), or some other tree like the cedar or pine, I could not make out."

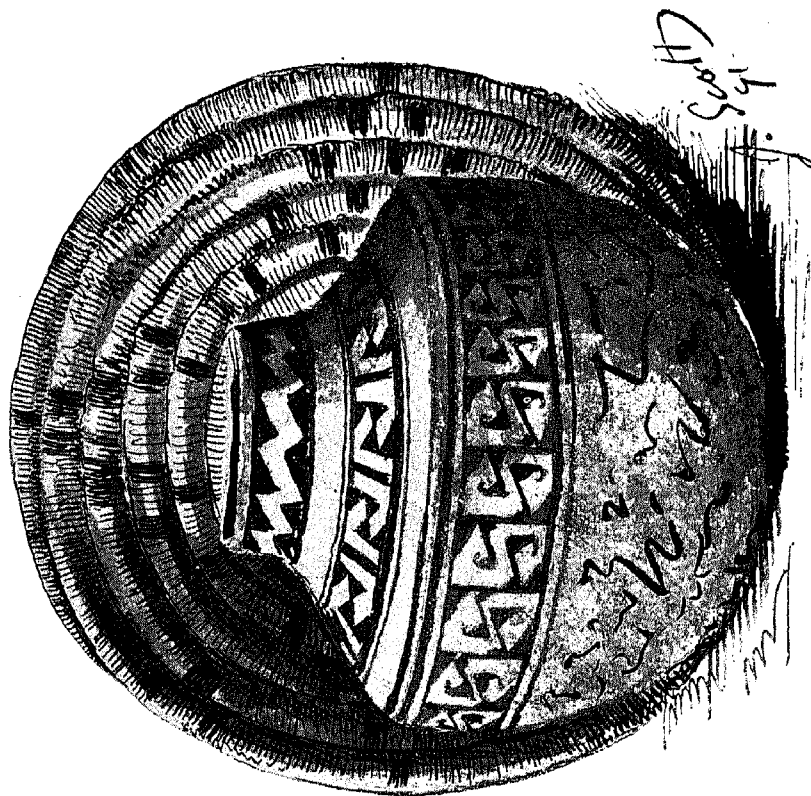


"POOBITCIE"-MOQUI GIRL OF PUEBLO OF SICHUMNAVI, ARIZONA



GATE OPEN.

Baskets and ollas or water jars, made by Moqui women, "Gates Closed" meaning those made by nonchildbearing women. "Gates Open," those made by childbearing women.



GATE CLOSED.

and when the end of the outer coil is left unfinished and scraggy it signifies that the woman making it is still able to bear children; in other words "the gate is open". When the end is finished and rounded she is unable to bear children, and "the gate is closed".

The Oraibis do not pay so much attention to this distinction in the decoration of their willow baskets. The large coil baskets or plaques are made on the second mesa, pottery principally on the first mesa, and the small willow baskets on the third mesa. The three great pottery pueblos are Sichelmuavi, Tewa, and Walpi. The method of making is by hand.

Unmarried women, maidens, wear their hair in the "cart wheel" "sideboard" style, denoting virginity, that is, they have "half a blanket to let", and are ready to wed. The married women braid their hair in two braids, parting it in the middle from the forehead to the back of the neck. Sometimes it is all brought forward and tied in a knot at the top of the forehead; some of them bang the hair and wear it cut short. Very young girls also wear the peculiar large "wheel" puff. The Moqui females spend much time in doing up their hair. They are particular to keep the scalp clean, and almost daily wash the hair with soapweed (amoli), which gives it a beautiful satin gloss. They frequently neglect the face while washing the hair. In washing the face or wetting the hair they fill the mouth with water and spurt it out (after the manner of Chinamen sprinkling clothes), a little at a time, in the hands, which are held together, forming a bowl, and then apply it to the face. They do not use towels; the air is so dry and moisture evaporates so quickly that there is no need of a towel.

The Moquis are very fond of tobacco and are habitual smokers, with a decided preference for the little yellow cigarette, which they make themselves. Its use among them is not confined to the men; women and children are also sharers in the smoking habit, and they all seem to enjoy it as much as they do their melons and peaches. They do not raise the tobacco usually smoked by them, but buy it from the traders. Small presents of it form a most excellent means of making friends with them.

Sometimes they blow the smoke slowly through the hand and waft it heavenward. When they can not get paper to make cigarettes the cottonwood leaves, which are tough and well adapted for the purpose, are used. It is amusing to see a small, nude child, not more than 5 years old, make a cigarette and smoke it with the air of a veteran. The Moquis have native tobacco, which they use in ceremonies. They do not use commercial tobacco in their ceremonies.

The domestic life, food, and cooking of the Moquis are generally similar to the Pueblos of New Mexico. They have in their domestic life all the charms of peace. Their bread (piki) consists of corn meal and water made into a thin batter, which is spread in handfuls over a large flat stone sufficiently hot to quickly bake it. When a number of these sheets or wafers have been cooked, they are rolled up together and laid away. (a) The women grind the corn for the bread on the metáte (or stone) with stones. Their cooking is done in rude fireplaces, generally in the corner of their rooms, but some of them now have modern stoves. Their cooking utensils are iron pots, kettles, and tomato cans, or anything that will hold water. Coffee pots, cups and saucers, and knives and forks are used, but not generally. Their rooms are furnished with blankets, sheepskins, pottery, sometimes a loom, and large stones for seats, but lately boxes and even chairs have made their appearance. Soups and stews are made from mutton or beef, with various small vegetables, including the onion. Cow's milk and butter are not used, goat's milk supplying the place of the former. Watermelons and peaches are their fruits. Sugar they buy when they can. They are very fond of all sweets.

The cattle, horses, burros, sheep, and goats are not owned in community but by individuals. The fields are owned by families or gentes, and worked by them together, the products being divided equally. The herds of each pueblo are cared for by herders assigned each day by the governor. The crier in the early morning passes through the streets arousing the herders, when the herds are driven out and brought back at night and placed in the stone pens about the mesas. The Oraibis own the most of the cattle of the Moquis. The herds are the property of individuals, but are herded as a whole.

The Moquis clip their sheep once or twice a year. The wool was formerly cut off with a knife, and recently a Moqui was seen using a piece of tin from a tomato can for sheep shearing; but shears are now generally used.

The Moquis, it is said, believe in a great spirit, who lives in the sun and who gives them light and heat. With the Moquis there is male and female in the idea of deity; the earth is the female, and all living things are the issue. (b)

^a John W. Powell, in 1875, thus wrote of the Moqui method of baking piki, or bread: "They take great pains to raise corn of different colors, and have the corn of each color stored in a separate room. This is ground by hand to a fine flour in stone mills, then made into a paste like a rather thick gruel. In every house there is a little oven, made of a flat stone, 18 or 20 inches square, raised 4 or 5 inches from the floor, and beneath this a little fire is built. When the oven is hot and the dough mixed in a little vessel of pottery the good woman plunges her hand in the mixture and rapidly smears the broad surface of the furnace rock with a thin coating of the paste. In a few moments the film of batter is baked; when taken up it looks like a sheet of paper. This she folds and places on a tray. Having made 7 sheets of this paper bread from the batter of one color and placed them on the tray she takes batter of another color, and in this way makes 7 sheets of each of the several colors of corn batter."

^b The Moquis know one all-wise and good spirit, Cotukinunniwa, "The Heart of the Stars". They have also Balilokon, the Great Water Snake, the spirit of the element of water, and they see him in the rains and snows, the rivers and springs, the sap in the trees, and the blood in the body. The whole Moqui heavens are filled, too, with Kateina, angels, or, literally, "those who have listened to the gods". All of the great dead men of the Moqui nation at some time before they died saw Kateina [Cachina or Katchena] and received messages from them, and some of the chiefs now living have seen them, too. As is so often found in the

Scrofula is prevalent to some extent among them; no cases of syphilis, however, are known to exist at the present time. The Moquis are a pure, an unmixed people. The bite of the rattlesnake has no terror to the Moquis, as their doctors cure it without fail, even after swelling has begun. The remedy applied is jealously guarded, and like other secrets is transmitted through the chief priests of the snake order.

Many of the Moquis possess firearms, repeating rifles, revolvers, and ammunition, for hunting (*a*), which they buy of the small traders that lurk about the outskirts of the reservation, many of whom, south of here, on the Little Colorado, are also selling whisky. Dancing is a social as well as a devotional matter with the Moquis. Their dances are very frequent.

As the women do most of the house building, such as laying the stones, plastering, and roofing, for this reason, perhaps, the dwellings belong to them. The Moqui women, it is said, own all the household goods as well as the houses. The descent of this property is in the female line and through the mother. The men do all the weaving of blankets, dresses, and sashes. The Moqui sacred blanket of white, with colored borders, is held in great esteem by all Indians. (*b*) The men are domestic and kind, the women are loving and virtuous, the children are obedient and return the affection bestowed upon them by their parents. The men own the small tracts of land which they cultivate.

The Moquis tan hides after the fashion of other Indians by scraping and rubbing with the brains of the animal and then stretching the hide until dry. Rawhide is generally used for the soles of their moccasins and for the covering of their saddles. Their boxes and sacks for the storing and transporting of provisions were formerly made of rawhide, but now they use commercial bags and boxes, which they procure from the traders. They are quick to receive and apply the ingenious articles used by white people.

religion of a people who are low in mental development, and in whose pitiful lives the hours of trial and privation and sorrow are much more numerous than the happy ones, that the spirit of good, though all-wise, is not all-powerful, so it is found here. Cotukinuniwa loves his children and would send to them nothing but good; but that he can not always do, for Balilokon is sometimes stronger than he, and wills evil. Yet it would not be right to call Balilokon the spirit of evil, for he is by no means always so. When he is pleased the mists and rains fall gently and the sap runs lustily through plants and trees, giving them vigorous growth; the springs and rivers are full, but clear, giving abundance of good water to the people and their flocks, and the blood flowing in the veins of the children of the tribe is the blood of health; but Balilokon is sometimes angered and the rains come not at all, or come in deluges that destroy; the rivers are dry or are raging floods; the sap is withdrawn from the plants and trees and they die, and the blood of the people flows through their veins but to poison. There have been times when the anger of Balilokon it seemed no ceremony or prayer could appease, then hundreds of the people went down to death, and one time, a day in the dim past, so many moons ago that their wisest one can not tell how many, he sent a great flood that covered nearly all the earth, and but very few of the people and not many of the beasts were saved. Balilokon, having it in his power to do so much of evil, is the god most prayed to, and in his name almost all of the ceremonies are held. At the foot of the cliff at the southern point of the mesa is a large rock [Moqui luck shrine] with a nearly flat top, about 8 by 10 feet in size, and a few yards to one side of it is a well-worn trail. On the top of the rock are thousands of pebbles, seemingly every one that could possibly be lodged there, and around the base are other thousands that have fallen. It is the great luck stone, and from time immemorial have the children of the villages gone there to get forecasts of their lives. Each little devotee of the blind goddess selects 3 pebbles, and while walking down the trail throws them, one by one, upon the rock. If but 1 pebble lodges the thrower will know much of sorrow and disappointment, yet his efforts will sometimes bear good fruits. If 2 pebbles stay he will find more than the average of success, and if all 3 lodge upon the top he may march onward boldly, for what can withstand him! Should all the little stones fall off, what then? Well, the child can ask himself but one question, "Why was I born?"—CHARLES R. MOFFET, 1889.

In the "neck" or "saddle" which connects the first of the Moqui "islands" of rock [the first or eastern mesa, on which is Walpi] with the main table-land is a shrine of great importance. It is a little inclosure of slabs of slate surrounding a large stone fetich, which has been carved into a conventional representation of the sacred snake. In 2 small natural cavities of the dance rock are also kept other large fetiches.—Charles F. Lummis, in "Some Strange Corners of Our Country", 1892.

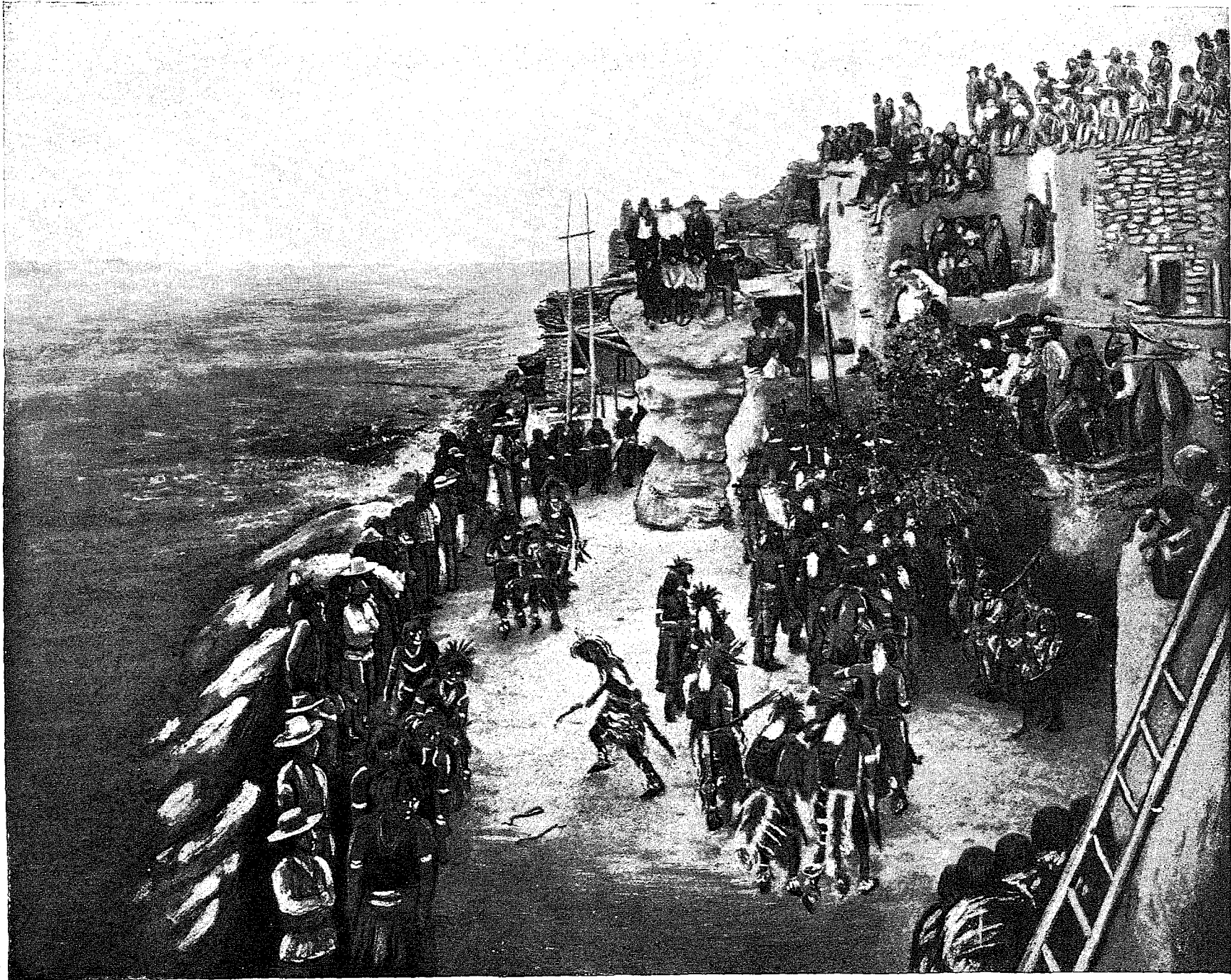
At points about the Moqui villages are altars and shrines, on or in which are idols made of wood or pottery, and at which the Moquis individually worship. Near Oraibi is a noted phallic shrine. The Moqui worship or devotional acts are largely private. Their communal and public worship is generally by dancing or in games. Some of these shrines may be the remains of the old Catholic worship.

a The Moquis still use bows and arrows for killing small game, and have a curious "boomerang" of wood, about 18 inches long, flat, say 1.5 inches wide and looped in the center, with which they kill rabbits. Whether they can throw this so deftly as to have it return to the thrower with the aid of the velocity which sends it away I can not verify. The boys are very adept in the use of the bow and arrow and the boomerang. The boomerang is the favorite weapon in the Moqui rabbit hunt [the Moquis use rabbit skins for robes and the flesh for food], besides it saves powder and shot or cartridges. As we were returning, about dark, from our last call we found most of the inhabitants of the village [Walpi] congregated in an open space, while from a housetop a chief was delivering a harangue. "The chief of the hunt proclaims a rabbit hunt for to-morrow", explained the doctor, "and all the able-bodied men and boys above a certain age must go". In these hunts the Moquis usually drive to some part of the plain to the south and east of the villages, where the little "cottontails" are very plentiful, and where they also find a good many of the large jack rabbits. Leaving all their firearms at home (powder and lead are too scarce and valuable to be used on rabbits), they go forth armed, some with bows and blunt arrows, but most of them only with pieces of wood shaped quite like a Turkish scimitar, the blade about 20 inches long, 2 inches wide, and one-quarter of an inch thick. From 50 to 100 Indians surround a large tract, gradually converge, driving the game before them. When near the center the rabbits attempt to escape through the lines, and they are knocked over by arrows or the crooked sticks, thrown by the hunters with wonderful skill. The hunts sometimes yield a marvelous number of cottontails, if the hunters can be believed.—C. R. MOFFET, 1889.

b Blankets are no more made by the Pueblos (of New Mexico), and they of Moqui alone continue to weave the women's dresses, with which they supply all the other (including New Mexico) pueblos, as they do with baskets.—CHARLES F. LUMMIS, 1892.

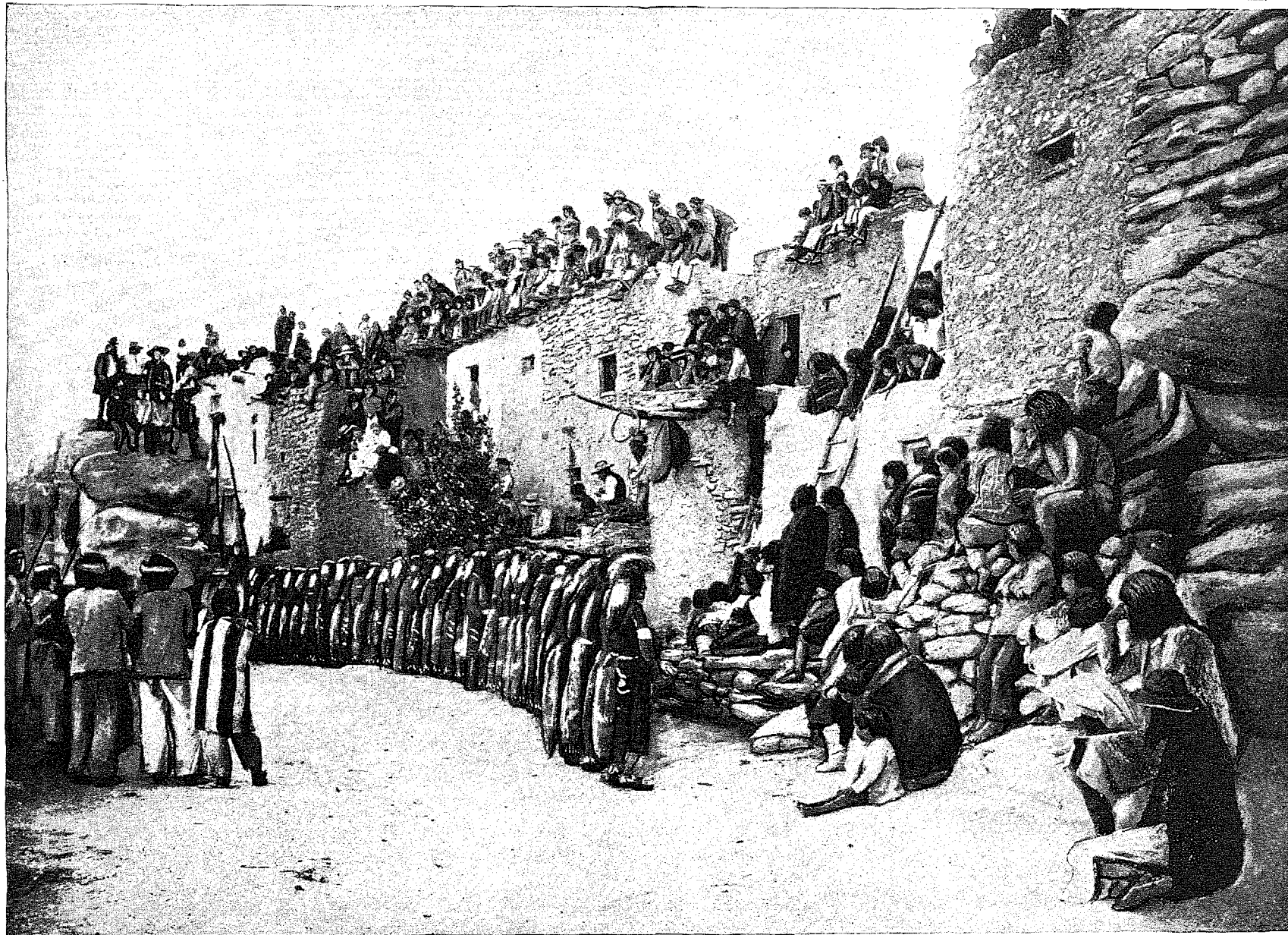
In 1875 John W. Powell wrote: "The greater part of their [the Moquis'] clothing is made of wool, though all of their priestly habiliments, their wedding and burying garments are still made of cotton".

The Moqui men weave a white blanket of wool of from 2 to 3 feet in width and 5 to 8 feet in length. These blankets, which have margins or borders worked in red and black of curious patterns, are both useful and artistic. They are costly, and are known as Moqui sacred blankets. The Moqui industries are few, blankets, fur clothing, baskets, and pottery being the staples. The Moqui blankets are eagerly purchased by other Indians. They keep out water and are of bright colors. Indians, the civilized as well as the wild, love bright colors. The blue or gray blankets issued by the United States the Indians soon drop or exchange for highly colored ones, and even in Minnesota one can at times see the Moqui, Navajo, and Mexican blankets on the stalwart Chippewas.



Photograph by B. Wittick.

SNAKE DANCE OF THE MOQUIS, WALPI, ARIZONA.



Photograph by B. Wittick.

SNAKE DANCE OF THE MOQUIS, WALPI—BEGINNING THE DANCE.



TOM POLAKI, Walpi, Arizona, 1890.
PE-TSCI, native of Sichumnavi, first mesa, Arizona, 1890.

SNAKE DANCE OF THE MOQUI PUEBLO INDIANS. (*a*)

The most famous dance of the American Indians is the snake dance of the Moquis. The details of the Moqui snake dance vary from year to year, because, while it is transmitted orally from tradition, much depends upon the imagination of the priests in charge. The old men with the Indians are the keepers of the mysteries and directors of ceremonies, and so, while certain essentials are never departed from, such as the fasting by the dancers, the race from the spring, the preparation of the antidote or decoction for snake bites, and the snakes, the dance itself is conducted according to the whims of the veteran leader. The snake estufa at Walpi is hewn out of the solid sandstone of the mesa and covered with logs, brush, and dirt. There is a ladder in it, but there are no benches around it.

SPECIAL AGENT SCOTT'S REPORT ON THE MOQUI SNAKE DANCE.—Irrigation or rain is what the Moqui country most needs. There is water, but it is so scarce and so difficult to obtain that the Moquis are obliged to go long distances for it, and so it becomes almost a luxury.

The snake dance of the Moqui Indians is to propitiate the water god or snake deity, whose name is Ba-ho-la-con-gua, and to invoke his aid in securing more water, that their fields may be made productive. It is an exhibition of religious zeal and remarkable for its quick changes. Its chorus chants are weird incantations, thrilling and exciting both spectators and celebrants.

The religious ceremonies prior to the public exhibitions of the dance occupy 8 days; they are held in the snake keva, or estufa, and are of a secret nature, although a few white men have been permitted to witness them. The dance is the closing scene of these long secret invocations, and its performance occupies but a short time, not more than 35 or 40 minutes.

The day preceding the snake dance the antelope order holds a dance, in which the snake order participates (the snakes are left out). The antelope order, which ranks next to that of the snake order, assists in the snake dance. The day before these singular final ceremonies the men of the antelope order prepare many little prayer sticks called ba-hoos (the ba-hoo is a small stick, to which, at one end, are attached one or more small, light feathers, and symbolizes a prayer), which they give to the men of the snake order, who, on the morning of their dance, go out from the pueblo and distribute them at all the springs. When these prayer sticks have been placed at the different springs or water holes the men race back to the keva at Walpi, on the mesa where the snake dance is to be held. The principal race is from Weepo (onion springs), at the north of Walpi, some 4 miles, down through the desert to the south end of the mesa, then up the difficult trails into the pueblo. In this running great endurance is exhibited, for the men have fasted for 4 days previous, partaking of nothing but a decoction prepared by the chief priest or priestess of the order as an antidote for the rattlesnake bite in case any may be bitten during the ceremonies. This antidote is known only to the chief priest and the priestess, and the secret is only imparted to their successors when they are obliged by age and infirmity to relinquish the functions of their office. The snake dance, which is the conclusion of the 8 days' ceremony before mentioned, takes place at Walpi every 2 years, in the middle of August, late in the afternoon. The day is appointed by the chief priest. This year (1891) the dance occurred on August 21, about 5 o'clock p. m., and lasted only 35 minutes. The men of the snake order, of course, were in the estufa in training for the 4 days before the dance.

For the ceremonies of the snake dance the pueblo is thoroughly cleaned, and quantities of melons, peaches, and other eatables are placed about in ollas and dishes. Piki, or corn bread, of many colors, is plentiful, and the evidences of a feast are on every hand. These people, although poor, remain hospitable; all visitors are welcome to eat. The number of visitors increases yearly, however.

On the afternoon of the dance, and long before the appearance of the actors, the Indians gathered on the hotsetops of the pueblo of Walpi, which overlook the court and sacred rock, all gaily dressed in bright colored blankets, ribbons, and feathers. Some young Indians climbed to the top of the sacred rock with the aid of a lariat, from which a better view could be had. Cowboys, with strong Saxon faces, and other visitors from the settlements were there in small numbers. The Indians gather from all the other pueblos of the Moqui group and a few from Acoma, Laguna, and Zuni. Altogether there must have been 500 people present, including the Navajos and whites, and General A. McD. McCook, commanding the district of Arizona, and staff; also Dr. Washington Matthews, the eminent ethnologist, and Special Agent John Donaldson.

There was a murmur of expectancy, when all looked toward the southern part of the inclosure and saw emerging through the narrow street the men of the antelope order dressed in short white cotton kilts, or skirts, with flowing sashes of the same material, all embroidered with curious designs in red, yellow, and green, the hair, worn loose, flowing down the back, with tufts of feathers, selected from the eagle's breast, tied at the top of their heads, from which tufts, falling down over their raven hair, were two tail feathers of the eagle; earrings, bracelets, and strings of beads, worn according to fancy, and heavily fringed moccasins and anklets completed the

^a Peter Moran, in company with Captain John G. Bourke, saw the snake dance at Walpi in August, 1883, and his notes differ materially from the account given by Special Agent Scott of the more recent dance. The accounts of the dance of 1883 by Mr. Moran and Captain Bourke (see "Moqui Snake Dance", by John G. Bourke) agree.

costume, while their faces were grotesquely painted in white, yellow, green, and black, resembling much their wooden gods in the disposition of the colors. The general arrangement was picturesque.

There were 17 men of the antelope order who assisted those of the snake order in their dance. The snake order numbered 37, a majority of whom were young men, a few were quite old, and 3 were boys recently initiated, the youngest not more than 5 years of age. The antelope order was headed by an important looking personage dressed different from the rest. He was the principal priest of his order, and in addition to the white cotton ceremonial kilt and girdle, feathers, fringed moccasins, and beads, he wore a coil of blue yarn over the right shoulder down to the left hip, a garland of cottonwood branches in leaf around his head and a similar one about the loins, and anklets and armlets of the same. He carried a bowl of sacred water in his left hand; in his right hand he held three eagle feathers, which he used in sprinkling the water over the space about the sacred rock where the dancers were to hold their unusual ceremony; he paid particular attention to the bosky (bosque) where the snakes had been placed. A man of the antelope order brought the snakes from the snake estufa in a gunny sack and placed them in the bosky about 15 minutes before the dance began; they were sprinkled with sacred meal by the priest before leaving the estufa. The snakes had been in the estufa for 3 or 4 days. The Indians catch the snakes by going into the desert, beginning about a week before the dance, in parties of two, who carry a bag of leather or cloth; one of the men carries a bag of sacred meal and one of them a ba-hoo. The rattlesnake and other snakes crawl into the "chill-dill-glizze" bush, known as the "hiding bush" by the Navajos.

One man sprinkled meal on the snake, the other attracted its attention by tickling it with the ba-hoo, while the first grabbed it by the neck and dropped it into the bag. The men sometimes catch the snakes while moving, but they believe that they must first sprinkle the snakes with meal. The catching party on its return to the pueblo puts the snakes in the estufa to wait for the day of the dance.

Some 20 or 30 feet from the sacred rock, north, and a little in front of the houses, the snake bosky is built. It is a low, stone inclosure, covered with long cottonwood boughs, standing upright, shaped like a Sibley tent, say 8 feet, and fastened together where the branches begin, leaving the branches free, with a cotton cloth about it. The antelope men came in single file, passing along the edge of the mesa, turning to the left and back in front of the snake bosky, then around the sacred rock, continuing to follow the ellipse they had described until they had passed the bosky several times, moving in a quickstep. They halted in front of the bosky and faced toward it; their priest advanced, made an invocation, and threw sacred meal in over the bag containing the snakes. He had the meal on a large black plaque of straw. It was a "gate open" plaque. The men then sang a low chant that was like the moaning of the wind before a storm; all the time an accompaniment of rattles, with which the men were provided, was kept up, producing a pattering sound like that of falling rain. This peculiar muffled sound was obtained by using the rattles, which are made of cottonwood, round and flat, instead of the gourd, which is pear-shaped.

At the conclusion of the chant the snake order made its appearance from the estufa, like their brothers of the antelope order, in single file, preceded by a stalwart leader, who carried a bow and a quiver filled with arrows. His hair and that of his followers fell loosely down the back, the front being banged just above the eyes. This leader also carried a buzz, or stick, attached to a string, which he would twirl through the air, making a noise like distant thunder. On the tops of their heads the men wore tufts of brown feathers. Their kilts were buckskin, dyed a brownish color, streaked with designs in black and white, and resembling a snake. Their moccasins were brown, and the general tone of their entire decorations was brown, which made all the more distinct the zigzag lines of white on their arms and bodies, which represented lightning. The forehead and lower legs were painted a pinkish color, their chins white, their upper lips and faces from the bottom of the nose to the ears black, and each wore a bandolier, or leather strap, over the right shoulder and down over the left hip. Attached at intervals to the lower part of this armament were numerous brown clay balls, tied to a band just above the calf of the leg; each one wore a rattle made of a turtle shell and sheep toes. As they came upon the scene, beyond the sacred rock, the antelope order faced about. The snake order made the circuit of the open space between the houses and the east side of the mesa three times before halting, then faced toward the snake bosky, in front of which is a deep hole, said to lead down to the "under world"; it is covered with a very thick plank, upon which each of the performers stamped with great force as they filed over it. A belief exists among them that whoever breaks this cover by so stamping upon it during a ceremony will succeed to a grand fortune of some kind.

After the three circuits had been made they took position in line facing the snake bosky, on the two flanks of which stood their brothers of the antelope order, who joined them in a weird song, the time being kept by the snake men taking a half step backward with the right foot, bringing the heel down with a quick movement, which caused the turtle shells and sheep toes to give, in their combined rattle, a noise not unlike the warning of the rattlesnake. This movement is measured and effective. As soon as the song was through the snake men again made the circuit of the small space between the houses and the east edge of the mesa, going around the sacred rock from left to right, near which stood a number of maidens arrayed in ceremonial dresses, who carried bowls of sacred water, with which they sprinkled the dancers as they passed, using the eagle feathers in the manner of the priests of the antelopes.

Now the thrilling part of the performance or ceremony begun. As the men returned by the same circuitous line and reached the space in front of the snake bosky, the bag having been opened and the snakes bountifully sprinkled with sacred meal by the priest, each dancer, as he came up, was handed a snake by the priest; the dancer then, after placing in his mouth a quantity of blue clay, which he carried in his left hand for the purpose, as a bed for the snake, placed the snake between his teeth, the head always toward the right shoulder and about 4 inches from the corner of his mouth.

There were 100 snakes in all, many of them rattlesnakes, but there were bull snakes, racers, and others (*a*), in size from 6 inches to 4 feet long, and they squirmed actively, doing their best to get away. As soon as the snakes were in the dancer's mouth he would be joined by an attendant from the antelope order, who placed himself upon the right of his brother, the right arm of the latter and the left arm of the former about each other's backs. The antelope attendants carried in their right hands large ba-hoos (prayer sticks), with which, the feathers waving backward and forward, they kept the snakes busy and, watching their movements, prevented them from striking. In the above manner, by twos, they continued the strange march, going round and round the sacred rock, from left to right, receiving baptisms of sacred water and meal from the maidens as they passed them. This they did six or seven times. The snake dancers threw their heads back and kept them as high as they could.

Now and then a snake got loose and fell upon the ground and began to glide away or coil to strike, but the attendant was ever watchful and never failed to so attract the snake's attention with the ba-hoos as to enable the dancer to pick it up and replace it in his mouth. The dancer was always careful to seize the snake just back of the head.

Each dancer kept the first snake handed to him. If it was a small one, the next time around he would obtain another small one, and thus have 2 in his mouth, and one man I saw with 3 long, slender snakes. Another man had but 1 small snake, which was entirely in the mouth except the head, neck, and just enough of the body to resemble a twisted cigar. Sometimes a dancer carried 1 or 2 snakes in his hands while he danced.

The incessant shaking of the rattles in the hands of the men was done apparently to attract the attention of the snakes and confuse them.

Near the conclusion of the ceremony one of the priests made a large circle on the ground in the plaza, or square, and when completed the dancers, as they passed it, deposited the snakes within its borders, where they were permitted to remain for a short time. It can be easily imagined that the mass of writhing snakes thus suddenly released and piled together made rather a hideous and forbidding spectacle, but not more so than when they were making vain endeavors to release themselves from the dancers' jaws; still, all this is not more repulsive than the performances given by so-called snake charmers, women particularly, who travel with shows and exhibit in museums in civilized life.

At a signal a rush was made, and the actors in this strange drama, men of the snake order, grabbed the snakes with quick and dexterous movements, some with 2 and 3 in each hand, holding them aloft, and in the "twinkling of an eye" they disappeared from the mesa, going north, south, east, and west; once in the desert their strange companions were freed.

From the time of departure with the snakes to the desert and return of the men the space seemed incredibly short. Some of the spectators attempted to follow them, but were obliged to desist owing to the precipitous descent and danger attending it. I followed out to the south end of the mesa only to find that the snake men had already reached the desert; some of them were on their return. As they came up over the top and were entering the pueblo I took several kodak shots at them as they passed me. When they had all gotten back they quickly removed their dancing costumes and donned the modern trousers, waistcoats, and hats. From fierce-looking savages they were transformed into meek and gentle-looking Moquis, and among them I recognized my old friend Adam, who had been interpreter at the school in Keams Canyon, whose kindly disposition is well known. A laughable scene followed the dance. As is their custom, all of the snake order, who had fasted for 4 days, partaking of nothing but a liquid prepared for them by the snake priest, to whom and the snake priestess only the decoction is known, assembled at a point just beyond the snake keva, where each drank of a liquid which produced violent vomiting. This final act closed the ceremonies.

They handled the snakes with great care so as not to hurt them and religiously returned them to their natural haunts when the dance was over, refusing many offers of money for some of the specimens; offers which would have tempted some so-called civilized people.

During the entire time, from the moment the snakes were taken out of the bosky until they were thrown into the mass or pile on the ground within the ring of meal made by the priest, all was intense action. The participants and the attendants never for one moment let the interest relax, but drove everything on with force. The celerity of the proceedings evidently kept the snakes muddled. The snakes were not, to my knowledge, doctored for the occasion.

a In 1883 there were believed to be 14 kinds of snakes used in the dance. Captain Bourke gives the chief ones: 1, *chú-a* (rattler); 2, *le-lu-can-ga* (this has yellow and black spots, and may be the bull snake); 3, *tá-ho* (runs very fast; may be the racer); 4, *pa-chu-a* (a water snake); 5, *tegua-chí-gui*. Of all these the rattler would be the most numerous.

During the dance 2 of the snake order were struck by rattlesnakes, one in the nose, the other in the upper portion of the arm. They drew back for a moment but continued the dance, and no ill effects were afterward noticed from the bites. The man struck in the nose had some difficulty in getting the snake off, and only did so with his attendant's assistance.

The snake order is spreading among the Moquis. Their chief religious ceremonies have been confined to Walpi for untold time. Now branches of the order have been established at Oraibi, Shimopavi, and, I believe, in Shipaulavi. The ceremonies occur here every 2 years. Next year it will take place at Oraibi, 2 years from now again at Walpi and Shimopavi. The day for its celebration is selected by the chief priest, and the date of its occurrence is approximately established by watching the sun's declination toward the south. They note the shadows that fall in the crevice of a rock, and in the same way reckon the day for their Christmas dance, the occasion for a dance to their sun god, which is about December 22.

The Moquis have been told that the government intends to stop the snake dance, and they say that it will be a great wrong, since it is a part of their religion, and they feel that their rights will thus be taken from them by denying them the privilege of worshiping after the manner of their fathers, which is not denied the white people of the country. This snake dance is a religious ceremony and most solemnly conducted.

ANTIDOTE FOR SNAKE BITES.—The liquid which the members of the snake order drink during the 4 final days of the ceremony is an antidote to the poisonous effect of the rattlesnake bite, and I have been assured that it never fails. I saw a Moqui who had been bitten while in the fields who did not get the aid of the snake priest for an hour later, but who recovered, although his arm was greatly swollen before he received the antidote. He was unable to do much for several days.

Mr. Scott wrote further as to the kind of snakes which bit the men at the dance:

There was no apparent swelling of the nose or of the arm of the 2 men bitten at the snake dance. I saw them after the dance, during the vomiting act, which was laughable, and I could not observe any effects therefrom, except the small incisions made by the snakes' fangs. I know of no dogs having been bitten at the dance of August 21, 1891, by one of the snakes, but I have heard of a dog that was struck by a rattler at one of the dances, and that the dog died. This is hearsay, but I believe the story.

Special Agent Peter Moran, who witnessed a snake dance at Walpi in August, 1883, wrote of the snakes used in the dance and the antidote for their bites, as follows:

During the dance, between 4 and 5 p. m., a rattlesnake struck one of the dancers on the right ear and held on. The antelope man became frightened and ran away. The dancer, becoming angry, grabbed the snake, which was a large one, tore it from his ear, and threw it on the ground, but the bitten ear did not swell. The snake, thus released, coiled and struck at a Navajo, who was standing near the edge of the mesa, which so frightened the man that he drew back and ran off, and the snake bounded back of the sacred rock and got among some Indian women, who were mortally afraid and ran away in fright, then he escaped. If the snake had been doctored, and was not venomous, they would not have been afraid of it.

We went again, the day of the dance, in the afternoon from 1 to 4, to the estufa where the snakes were kept. * * * We found that the altar had been destroyed and in its place, on the spot, was a bowl containing a medicine or decoction which Bourke uncovered and tasted. This was the snake antidote. Of this Captain Bourke writes: "I lifted the cloth and found the basin or platter to be one of the ordinary red ware. It was filled with water. * * * The water had a slightly saline taste and evidently contained medicine".

Captain Bourke, in 1883, wrote of the antidote and the estufa ceremony with the snakes prior to the dance as follows:

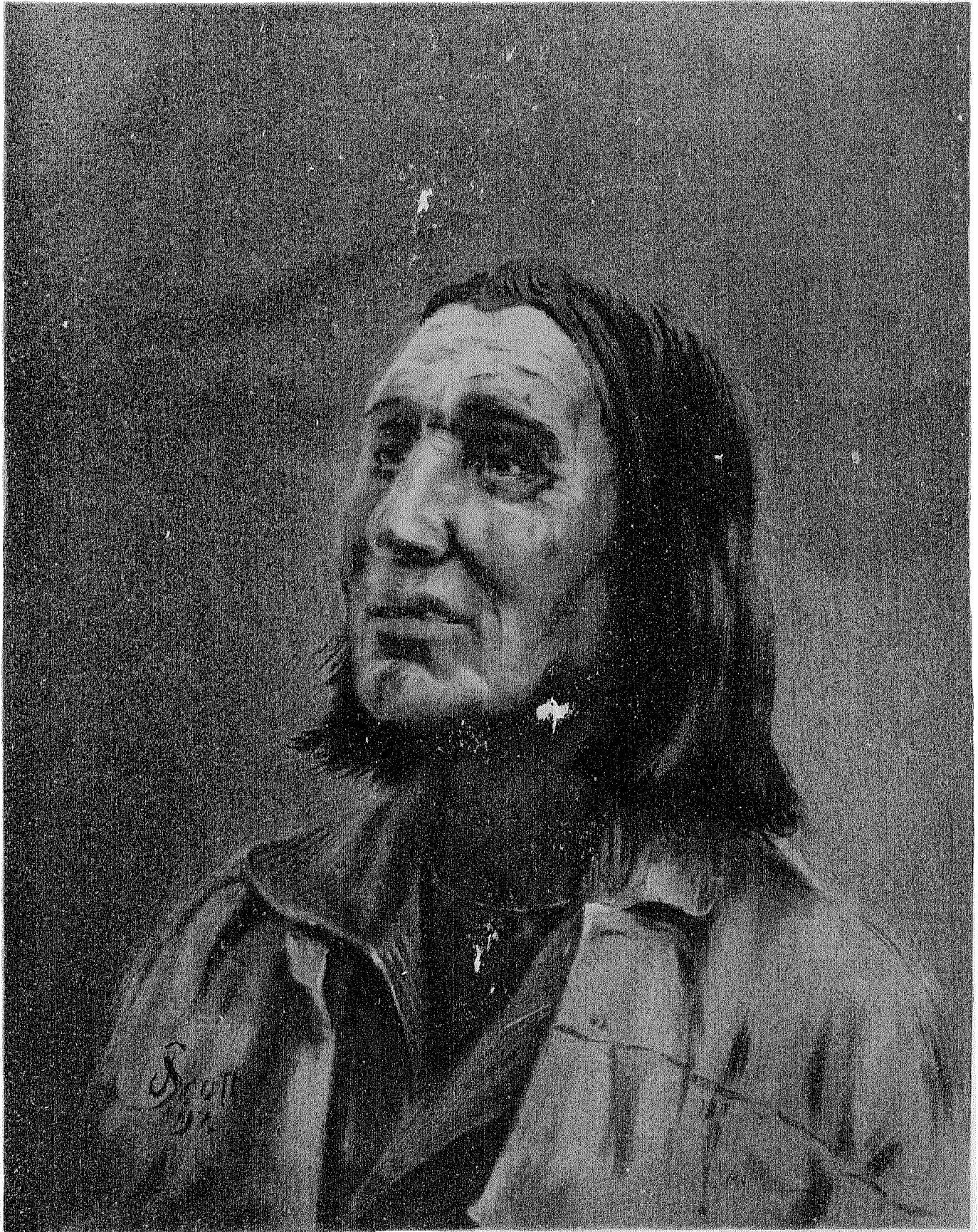
The head medicine men alone know the secrets of this ceremony, the means to be taken to keep the reptiles from biting, and the remedies to be applied in case bites should be received.

The decoction, or antidote, is kept on hand at all times by the snake priest, and is not only administered to the dancers at the snake dance, but to all requiring it.

Mr. Moran wrote of the snakes used in the dance of 1883 that he was "convinced that the snakes were not doctored, neither was their poison exhausted by letting them strike a board or other object".

Captain Bourke, August 12, 1883, wrote:

Our mules (the day of the snake dance) were brought up from the plains very soon after daybreak. Nobody in the pueblos could be hired for love or money to take care of them during the dance, and, as a measure of prudence, they should not be exposed to the risk of bites from the venomous reptiles which the Moquis might release after the ceremony and allow to wander unchecked over the country. The chances were largely in favor of their being bitten, and I was not willing to incur any such responsibility.



CAPTAIN JOHN.

HOOPA VALLEY INDIAN.—CALIFORNIA, 1891.